

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Item No.: HARDENER 81502 Part of Kit: 81502  
 Product Type: Epoxy hardener

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS No.	%
Polymercaptan	Proprietary	80-85
Substituted aminophenol	90-72-2	5-10
Nonylphenol	25154-52-3	3-5
Heptakis (dipropylene glycol) triphosphite	116265-68-0	1-3

Ingredients which have exposure limits

Exposure Limits (TWA) Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
Exposure Limits (STEL) Ingredients	ACGIH (TLV)	OSHA (PEL)	

3. HAZARDS IDENTIFICATION

Toxicity: Skin and eye irritant. Possible respiratory irritant. The aminophenol can cause severe irritation and may be corrosive on prolonged contact. It may be a sensitizer. It can also be corrosive to eye tissue leading to permanent injury including blindness. It may irritate the respiratory tract and may cause delayed lung damage upon overexposure to fumes or vapors. It can also cause fatigue, muscular weakness, labored breathing, or gastrointestinal irritation if swallowed. The relatively low concentration of the aminophenol in the product may minimize some or all of these effects.

Primary Routes of Entry: Skin, ingestion, inhalation.

Signs and Symptoms of Exposure: Eye, skin, respiratory, or gastrointestinal irritation. It is possible that such irritation may be severe and lead to burns. Allergic reactions may occur.

Existing Conditions Aggravated by Exposure: Skin, eye, lung conditions.

Ingredients	Literature Referenced Target Organ and Other Health Effects	Carcinogen		
		NTP	IARC	OSHA
Polymercaptan	No Data	NO	NO	NO
Substituted aminophenol	ALG IRR	NO	NO	NO
Nonylphenol	ALG COR IRR KID	NO	NO	NO
Heptakis (dipropylene glycol) triphosphite	NR	NO	NO	NO

Abbreviations

ALG Allergen COR Corrosive  
 IRR Irritant KID Kidney  
 NR No Records

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Keep individual calm. Obtain medical attention.  
 Inhalation: Remove to fresh air. If symptoms persist, obtain medical attention.  
 Skin Contact: Wash with soap and water.

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4. FIRST AID MEASURES (continued)

Eye Contact: Flush at least 15 minutes with water. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: More than 200°F Method: Tag Closed Cup

Recommended Extinguishing Agents: Carbon dioxide, foam, dry chemical

Special Firefighting Procedures: Not available

Hazardous Products formed by Fire or Thermal Decomposition: Oxides of carbon, sulfur, nitrogen and phosphorus, phosphite/phosphate esters, hydrocarbon fragments, hydrogen sulfide, phenols, phosphine.

Unusual Fire or Explosion Hazards: None

Explosive Limits:  
(% by volume in air) Lower Not available  
(% by volume in air) Upper Not available

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak: Take up with an inert absorbent. Store in a closed container until disposal.

7. HANDLING AND STORAGE

Safe Storage: Store below 110°F.  
(Contact Loctite Customer Service 1-800-243-4874 for shelf life information)  
Handling: Avoid skin contact. Keep away from eyes. Do not breathe vapors.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Safety glasses or goggles.  
Skin: Rubber or plastic gloves.  
Ventilation: Local exhaust ventilation should be provided.  
Respiratory: NIOSH/MSHA approved organic cartridge respirator if ventilation is inadequate.

See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless, viscous liquid.  
Odor: Unpleasant  
Boiling Point: More than 300°F  
pH: Does not apply  
Solubility in Water: Slight  
Specific Gravity: 1.08  
Volatile Organic Compound (EPA Method 24) 11.08%; 119.7 grams per liter  
0.026% Total Volatile Content, tested as mixed with resin (modified EPA Method 24)  
Vapor Pressure: Less than 5mm at 80°F  
Vapor Density: Not available  
Evaporation Rate (Ether = 1) Not available

10. STABILITY AND REACTIVITY

Stability: Stable  
Hazardous Polymerization: Will not occur  
Incompatibility: Strong oxidizing agents, epoxy/amine mixtures.  
Possibly acids, peroxides, acetaldehyde, caustics.  
Conditions to Avoid: Not available  
Hazardous Decomposition Products (non-thermal): None

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11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal: Incinerate following EPA and local regulations.  
EPA Hazardous Waste Number NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172)  
Domestic Ground Transport  
Proper Shipping Name: Unrestricted  
Hazard Class or Division: Unrestricted  
Identification Number: None  
Marine Pollutant: None  
IATA  
Proper Shipping Name: Unrestricted  
Class or Division: Unrestricted  
UN or ID Number: None

15. REGULATORY INFORMATION

CA Proposition 65: No California Proposition 65 chemicals are known to be present.

16. OTHER INFORMATION

Estimated NFPA(R) Code:  
Health Hazard: 2  
Fire Hazard: 1  
Reactivity Hazard: 0  
Specific Hazard: Does not apply

Estimated HMIS(R) Code:  
Health Hazard: 2\*  
Flammability Hazard: 1  
Reactivity Hazards: 0  
Personal Protection: See Section 8.

NFPA is a registered trademark of the National Fire Protection Assn.  
HMIS is a registered trademark of the National Paint and Coatings Assn.

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